REMARKS

Applicants thank Examiner DelCotto for conducting the kind and courteous discussion with Applicants' representative on November 19, 2004. The contents of the discussion are reflected in the amendments to the claims and the comments contained herewith.

An aspect of the present invention is directed to a thickener comprising a fatty acid alkanolamide represented by formula (1):

$$\begin{array}{c|cccc}
O & R^{2} \\
| & | & | \\
R^{1} - C - NH - C - CH_{2}O(AO)_{n}H & (1) \\
& & R^{3}
\end{array}$$

wherein R¹ represents a straight-chain or branched alkyl or alkenyl group, having 5 to 21 carbon atoms, which may be substituted with at least one hydroxyl group, R² and R³ independently represent an alkyl group having 1 to 2 carbon atoms, AO represents an oxyalkylene group having 2 to 4 carbon atoms and n denotes a number of 0 to 10 in average.

The rejection of Claims 1-2 and 3-6 under 35 U.S.C. § 103(a) over WO 99/46356 (hereinafter referred to as WO '356) is respectfully traversed.

The rejection of Claims 3-6 under 35 U.S.C. § 103(a) over US 6,172,035; US 6,514,918; and EP 0232153 (either separately or in combination and hereinafter referred to as US '035; US '918; and EP '153; respectively) is respectfully traversed.

As noted in the discussion, none of the references describe or suggest a thickener that comprises the fatty acid alkanolamide as claimed in Claim 1. It is true that these references describe alkanolamides. However, it is believed that the evidence of record will show that Claims 1-4 and 6-14 are unobvious in view of these disclosures. A better appreciation of this

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position may be understood in view of the compounds that are disclosed in each of the four references.

For convenience, the following Table provides a comparison between the fatty acid alkanolamides that are claimed and disclosed in the references relied upon for the present rejections.

	Fatty Acid Alkanolamide	R ¹	A	n	х
Claimed	R^{1} R^{2} R^{3} R^{3} R^{2} R^{3} R^{2} R^{3} R^{2} R^{3} : C_{1} - C_{2}	C ₅ -C ₂₁	C ₂ -C ₄	0-10	n/a
<u>US '035</u>	R^{1} N R R R R R	C ₁₃ -C ₁₇	C ₂ /C ₃	1.5-5.5	n/a
WO '356	R^{1} N AO n H	C ₃ -C ₂₁	C ₃ /C ₄	1-6	n/a
<u>US '918</u>	R^{1} N AO n H	C ₆ -C ₃₀	C ₃	0-40	0-20
EP '153	R: ethylene or propylene Y: H or -R(CH ₂ CH ₂ O) _m H; m 0, 1, or more	C ₇ -C ₁₈	C ₂	0 or ≥1	n/a

The Table shows chemical representations of each of the fatty acid alkanolamides under consideration. With the exception of two compounds, the same alkyl and integer

designators are used. General meanings for each of the designators (R^1 , A, n, x) appear to the right of each structure. Specific compound information is shown beneath each structure. The Examiner's attention is directed to the Greek letter symbols that appear on the two carbon atoms to the right of the amide nitrogen. The carbon atom of the ethylene chain that is bonded to the amide nitrogen is labeled as α and is designated as C_{α} , while the carbon atom bonded to C_{α} is labeled as β and is designated as C_{β} .

As discussed with the Examiner on November 19, 2004, obviousness rejections should only be made when there is a suggestion in the cited references to alter the compounds that appear in the cited references to arrive at the claimed compound. There is no suggestion contained in the combined disclosures that suggest that a fatty acid alkanolamide, in which the α carbon bears two additional alkyl substituents, can serve as an effective ingredient for a thickener. The differences between the claimed compound and that which is disclosed in the references at issue are as follows.

US '035 describes a fatty acid alkanolamide that bears a methyl group at the β carbon. There is no suggestion in US '035 to remove the methyl group from the β carbon move it over to the α carbon and add an additional methyl group or for that matter any other alkyl groups at C_{α} . In other words, the claimed compound and the compound disclosed in US '035 is thrice removed from one another.

Now, if <u>US '035</u> described or even suggested a compound in which a methyl group was present at C_{α} , then it could be conceivably suggestive to add an additional C_{1-2} alkyl group at C_{α} . However, this is not the case. There is not even a whisper of a suggestion to add any other substituent to the ethylene linker that is bonded to the amide nitrogen. If anything <u>US '035</u> states that if an alkyl group is present on the ethylene linker, then it should be at C_{β} and not at C_{α} .

The Examiner's attention is directed to <u>US '035</u>'s disclosure directed to this particular aspect (col. 1, $\ell\ell$. 31-49). In this disclosure, it is stated that a "multiplicity of thickening agents have therefore been proposed in the prior art for surface-active preparations," and that US Pat. No. 3,856,711 discloses fatty acid amides based on dialkanolamines such as diethanolamine." <u>US '035</u> goes on to state that "these thickening agents are no longer acceptable because of the potential nitrosamine formation and the associated carcinogenic potential." Moreover, <u>US '035</u> states that "thickening agents based on fatty acids and monoisopropanolamine do not have this disadvantage, but their thickening action only develops at elevated amide concentrations." <u>US '035</u>'s solution to this problem is to use a compound that has a single methyl substitution at C_{β} . That is, a compound that is a fatty acid alkanolamide that is derived from a fatty acid and monoisopropanolamine.

In the absence of a suggestion to have any alkyl substituents on C_{∞} and in consideration of the fact that when <u>US '035</u> suggest a substituent, it is at the C_{β} position only, it is believed that there can be no case of obviousness.

It is kindly requested that the Examiner acknowledge the same and withdraw this rejection.

The three compounds disclosed in WO '356, US '918, and EP '153 are all similar in that they disclose ethylene groups without any alkyl substituents. Thus, the following discussion will focus on all three together when compared to the claimed compound.

First, there is no suggestion in any of the references to employ an alkanolamide with a substituent on any carbon (C_{α} or C_{β}) of the ethylene linker that is bonded to the amide nitrogen. These references show that the disclosed compounds bear an ethylene (or in the case of EP '153 propylene) linker that is bonded to the amide nitrogen and has hydrogen substituents only.

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Second, both <u>US '918</u> and <u>WO '356</u> (see Abstracts) describe ethylene linkers that bear methyl substituents; but these ethylene linkers are not bonded to the amide nitrogen. These linkers are three atoms removed from the amide nitrogen, and are in no way related to the ethylene linker that is bonded to the amide nitrogen except that they both reside in the same molecule.

In view of these two considerations, it is believed that the compound described in these three references are dissimilar enough from the claimed compound that it would not be obvious to one of ordinary skill to add C_{1-2} alkyl substituents at the C_{α} position.

As with US '035, had any of these references described or suggested that there be one C_{1-2} alkyl substituent on C_{∞} then it could be argued that addition of an additional alkyl group at this position could be envisioned by one of ordinary skill. That is, if there had been an alkyl substituent on C_{∞} ; then the difference between the claimed compound and this "hypothetical compound" is once removed; and therefore, close enough to be potentially suggestive. However, there are no substituents on the carbon atoms of the ethylene linker that is bonded to the amide nitrogen, which makes the differences between the claimed compound and the disclosed compound is at least twice removed; and according to present U.S. Patent Law standards, the claimed compound is unobvious with respect to the disclosed compounds of WO '356, US '918, and EP '153.

It is respectfully requested that the Examiner acknowledge the same by realizing that the compounds contained in the cited references are too far removed from the claimed compound and that there is no suggestion to make the necessary modification. Accordingly, Applicants ask that the Examiner withdraw these rejections.

The rejection of Claim 5 under 35 U.S.C. § 112, second paragraph, is respectfully traversed.

The rejection of Claim 5 under 35 U.S.C. § 101 is respectfully traversed.

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Claim 5 is cancelled.

It is requested that the Examiner withdraw these rejections.

In view of the amendments to the claims and the comments above, it is believed that the present application is in a condition for allowance. Should the Examiner deem that a personal or telephonic interview would be helpful in advancing this application toward allowance, he is encouraged to contact Applicants' undersigned representative at the below-listed telephone number.

Respectfully submitted,

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